

IN THE SPECIFICATION

Please replace paragraph [0007] of the published specification with the amended paragraph shown below.

[0007] FIG 2 is a diagram showing a detail of a bypass element according to an embodiment of the present invention, as inserted in a valve of a catheter of an embodiment of the connector according to the present invention, including an extension tube;

Please replace paragraph [0008] of the published specification with the amended paragraph shown below.

[0008] FIG. 3 is a diagram of another embodiment of the connector according to the present invention, including an extension tube showing a detail of a bypass element according to an embodiment of the present invention, as inserted in a valve of a catheter; and

Please replace paragraph [0019] of the published specification with the amended paragraph shown below.

[0019] A more detailed understanding of the functioning of the bypass element according to the present invention can be obtained by referring to the diagram shown in ~~FIG. 2~~ FIG. 3. The bypass element comprising hypotube 108 is shown inserted into the proximal end 212 of a catheter 200. A valve 202, for example a PASV, is located within proximal end 212, to prevent fluids from entering or escaping the catheter 200 as described above. The valve 202 comprises inlets 204, 206 and a slitted flow control membrane 208 which allows fluid to flow through the valve 200 only under predetermined conditions. As would be understood by those skilled in the art, the flow control membrane 208 may be a flexible polymeric membrane with one or more slits formed therethrough. As described above, when a fluid of at least a threshold pressure impinges on the membrane 208, edges of the slit separate from one another to form an opening

210 and, when the fluid pressure drops below the threshold level, the slit is closed to prevent fluid flow therethrough.

Please replace paragraph [0020] of the published specification with the amended paragraph shown below.

[0020] As shown in FIG. 3 ~~FIG. 2~~, the hypotube 108 is sized so that it extends through the slit, past the flow control membrane 208 when the connector 100 is in its operative position attached to the proximal end 212 of the catheter 200. The diameter of the hypotube 108 is preferably selected to be smaller than a maximum opening size "d" of membrane 208, so insertion of the hypotube 108 therethrough does not damage the membrane 208. As shown, the tip 112 of the hypotube 108 extends beyond opening 210 so that the fluid exiting the orifice 114 is injected beyond the membrane 208, and cannot damage it. The tip 112 may be shaped (e.g., rounded) to facilitate the opening of the slit without damaging the membrane 208. In some embodiments, the hypotube 108 may extend beyond the outlet 204 of the valve 200, to further prevent damage by reducing the effects of any back flow on the flow control membrane 208. The distal end 220 of the connector 100 may be shaped to form a seal with the proximal end 212 of the catheter 200, when the connector 100 is placed therein in the operative position to minimize leakage from the open membrane 208 and maintain a sterile environment in and around the catheter 200.